

Title (en)

SELECTION OF POSITIONING METHOD, AND CONTROL METHOD AND APPARATUS FOR SAME

Title (de)

AUSWAHL VON POSITIONIERUNGSVERFAHREN SOWIE STEUERUNGSVERFAHREN UND VORRICHTUNG DAFÜR

Title (fr)

SÉLECTION D'UN PROCÉDÉ DE POSITIONNEMENT, ET PROCÉDÉ DE COMMANDE ET APPAREIL ASSOCIÉ

Publication

**EP 3119142 B1 20200617 (EN)**

Application

**EP 15760953 A 20150312**

Priority

- CN 201410093063 A 20140313
- CN 2015074099 W 20150312

Abstract (en)

[origin: EP3119142A1] The present invention provides a method and device for transmission on unlicensed spectrum in a UE and a base station. In view of the problem of DFS constraints and PHICH resource waste that is caused by communication of an uplink synchronous HARQ on unlicensed spectrum, in the present invention, logical information is configured so that PUSCHs transmitted through different sub-frames on different physical carriers form one logical carrier, and PHICH resources are reserved for the logical carrier. As an embodiment, downlink signaling is sent in a sub-frame for sending a PHICH so as to indicate transmission bandwidth for data retransmission. The solution provided in the present invention saves PHICH resources and eliminates the constraints on the DFS by the synchronous HARQ. Besides, the present invention reuses the CA scheme in the existing LTE as much as possible, and has high compatibility.

IPC 8 full level

**H04W 64/00** (2009.01); **H04W 4/02** (2018.01); **H04W 72/54** (2023.01)

CPC (source: CN EP US)

**G01S 5/0236** (2013.01 - EP); **G01S 5/0263** (2013.01 - EP); **H04W 4/026** (2013.01 - EP US); **H04W 24/08** (2013.01 - US);  
**H04W 64/00** (2013.01 - CN EP US); **H04W 64/006** (2013.01 - CN); **H04W 72/542** (2023.01 - US); **H04W 72/56** (2023.01 - US);  
**H04J 11/00** (2013.01 - US); **H04W 88/02** (2013.01 - US)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

**EP 3119142 A1 20170118; EP 3119142 A4 20170308; EP 3119142 B1 20200617;** CN 104918324 A 20150916; US 2017006426 A1 20170105;  
US 9942714 B2 20180410; WO 2015135486 A1 20150917

DOCDB simple family (application)

**EP 15760953 A 20150312;** CN 201410093063 A 20140313; CN 2015074099 W 20150312; US 201515125577 A 20150312